

General

Title

Cardiac care: percentage of patients with cardiac arrest (CA) meeting the inclusion criterion who undergo therapeutic hypothermia.

Source(s)

Quality indicators in critically ill patients. Madrid (Spain): Spanish Society of Intensive and Critical Care and Units Coronary (SEMICYUC); 2011. 185 p.

Measure Domain

Primary Measure Domain

Clinical Quality Measures: Process

Secondary Measure Domain

Does not apply to this measure

Brief Abstract

Description

This measure is used to assess the percentage of patients with cardiac arrest (CA) meeting the inclusion criterion who undergo therapeutic hypothermia.

Rationale

The aim of intensive care medicine is to provide critical patients with the healthcare that they need, ensuring the quality and safety of care. Intensive care medicine is one of the principal components of modern healthcare systems. There is an increasing demand for this resource, which involves high costs.

The quality of care has gradually come to be the central focus of healthcare, and in recent years patient safety has come to represent one of the key aspects of quality. In the case of intensive care medicine, this interest in quality is even more evident, not only because of its social and economic impact, but also because some of the dimensions involved in the quality of care of critical patients take on greater importance: critical patients are more vulnerable, access to critical care is more limited so efforts to

distribute resources equitably are more important, scant scientific evidence is available, and the efficiency is limited.

Moderate hypothermia induced after cardiac arrest (CA) in patients who remain in coma after recovering circulation has proven to improve the neurological prognosis and reduce mortality. A lower level of evidence is recognized for its use after CA due to heart rhythms that do not respond to defibrillation.

Evidence for Rationale

Arrich J, Holzer M, Herkner H, Mullner M. Hypothermia for neuroprotection in adults after cardiopulmonary resuscitation. *Cochrane Database Syst Rev.* 2009 Oct 7;(4):CD004128. [PubMed](#)

Martin-Hernandez H, Lopez-Messa JB, Perez-Vela JL, Molina-Latorre R, Cardenas-Cruz A, Lesmes-Serrano A, Alvarez-Fernandez JA, Fonseca-San Miguel F, Tamayo-Lomas LM, Herrero-Ansola YP, miembros del Comité Directivo del Plan Nacional de RCP de la SEMICYUC. [Managing the post-cardiac arrest syndrome. Directing Committee of the National Cardiopulmonary Resuscitation Plan (PNRCP) of the Spanish Society for Intensive Medicine, Critical Care and Coronary Units (SEMICYUC)]. *Med Intensiva.* 2010 Mar;34(2):107-26. [141 references] [PubMed](#)

Nolan JP, Soar J, Zideman DA, Biarent D, Bossaert LL, Deakin C, Koster RW, Wyllie J, Bottiger B, ERC Guidelines Writing Group. European Resuscitation Council Guidelines for Resuscitation 2010 Section 1. Executive summary. *Resuscitation.* 2010 Oct;81(10):1219-76. [PubMed](#)

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Primary Health Components

Cardiac care; cardiac arrest (CA); therapeutic hypothermia

Denominator Description

Number of patients with cardiac arrest (CA) meeting the inclusion criterion (see the related "Denominator Inclusions/Exclusions" field)

Numerator Description

Number of patients with cardiac arrest (CA) meeting the inclusion criterion who undergo therapeutic hypothermia (see the related "Numerator Inclusions/Exclusions" field)

Evidence Supporting the Measure

Type of Evidence Supporting the Criterion of Quality for the Measure

A clinical practice guideline or other peer-reviewed synthesis of the clinical research evidence

A formal consensus procedure, involving experts in relevant clinical, methodological, public health and organizational sciences

A systematic review of the clinical research literature (e.g., Cochrane Review)

Additional Information Supporting Need for the Measure

Unspecified

Extent of Measure Testing

Unspecified

State of Use of the Measure

State of Use

Current routine use

Current Use

not defined yet

Application of the Measure in its Current Use

Measurement Setting

Hospital Inpatient

Intensive Care Units

Professionals Involved in Delivery of Health Services

not defined yet

Least Aggregated Level of Services Delivery Addressed

Single Health Care Delivery or Public Health Organizations

Statement of Acceptable Minimum Sample Size

Unspecified

Target Population Age

Age greater than or equal to 18 years

Target Population Gender

Either male or female

National Strategy for Quality Improvement in Health Care

National Quality Strategy Aim

Better Care

National Quality Strategy Priority

Prevention and Treatment of Leading Causes of Mortality

Institute of Medicine (IOM) National Health Care Quality Report Categories

IOM Care Need

Getting Better

IOM Domain

Effectiveness

Data Collection for the Measure

Case Finding Period

Unspecified

Denominator Sampling Frame

Patients associated with provider

Denominator (Index) Event or Characteristic

Clinical Condition

Institutionalization

Denominator Time Window

not defined yet

Denominator Inclusions/Exclusions

Inclusions

Number of patients with cardiac arrest (CA) meeting the inclusion criterion

Note:

Inclusion criterion: Persistent coma after circulation is recovered. Both rhythms that can be defibrillated and those that cannot are included.

Population: All patients with CA who meet the inclusion criterion discharged from the critical care department during the study period.

Exclusions

Cardiogenic shock

Malignant arrhythmias

Pregnancy

Coagulation disorders

Orders to withhold life support

Exclusions/Exceptions

not defined yet

Numerator Inclusions/Exclusions

Inclusions

Number of patients with cardiac arrest (CA) meeting the inclusion criterion who undergo therapeutic hypothermia

Therapeutic hypothermia: Induction of moderate hypothermia (33 ± 1 °C) within 4 hours of CA.

Exclusions

Unspecified

Numerator Search Strategy

Institutionalization

Data Source

Electronic health/medical record

Paper medical record

Type of Health State

Does not apply to this measure

Instruments Used and/or Associated with the Measure

Unspecified

Computation of the Measure

Measure Specifies Disaggregation

Does not apply to this measure

Scoring

Rate/Proportion

Interpretation of Score

Desired value is a higher score

Allowance for Patient or Population Factors

not defined yet

Standard of Comparison

not defined yet

Prescriptive Standard

Standard: 90%

Evidence for Prescriptive Standard

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Identifying Information

Original Title

Therapeutic hypothermia after cardiac arrest (CA).

Measure Collection Name

Quality Indicators in Critically Ill Patients

Measure Set Name

Cardiac Care and Cardiopulmonary Resuscitation (CPR)

Submitter

Spanish Society of Intensive and Critical Care and Units Coronary - Clinical Specialty Collaboration

Developer

Spanish Society of Intensive and Critical Care and Units Coronary - Clinical Specialty Collaboration

Funding Source(s)

Boehringer Laboratories

Composition of the Group that Developed the Measure

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Financial Disclosures/Other Potential Conflicts of Interest

Unspecified

Adaptation

This measure was not adapted from another source.

Date of Most Current Version in NQMC

2011 Mar

Measure Maintenance

Unspecified

Date of Next Anticipated Revision

2016 Jul

Measure Status

This is the current release of the measure.

The measure developer reaffirmed the currency of this measure in May 2016.

Measure Availability

Source available in [English](#) and [Spanish](#) from the Spanish Society of Intensive and Critical Care and Units Coronary (SEMICYUC) Web site.

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NQMC Status

This NQMC summary was completed by ECRI Institute on November 18, 2013. The information was verified by the measure developer on February 6, 2014.

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Production

Source(s)

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